

**IN THE CLAIMS:**

On page 6, line 1, cancel "CLAIMS" and substitute --WE CLAIM AS OUR INVENTION:-- therefor.

Claims 1-4 have been cancelled.

5 1-4. (Cancelled)

Add the following new claims.

5. (New) A biventricular cardiac stimulation device comprising:  
a pulse generator adapted to interact respectively with ventricles of a  
heart to deliver stimulation pulses to each of the ventricles;

10 a control unit connected to the pulse generator to operate the pulse  
generator to emit a stimulation pulse to a first-stimulated  
ventricle, followed by a VV time delay, followed by a stimulation  
pulse to a second-stimulated ventricle;

15 an evoked response detector adapted to interact with the ventricles  
and having independent, first and second ventricular sensing  
channels to detect ventricular evoked response in the respective  
ventricles, said evoked response detector searching for an  
evoked response following delivery of a stimulation pulse to said  
first-stimulated ventricle in an evoked response detection time  
20 window;

25 said control unit setting said VV time delay to be shorter than said  
evoked response detection time window; and

25 said evoked response detector closing said evoked response detecting  
time window, or discarding detections therein, in response to  
emission of the stimulation pulse to the second-stimulated  
ventricle during said evoked response detection time window  
following said first-stimulated ventricle.

6. (New) A biventricular cardiac stimulation device as claimed in claim  
5, comprising an inhibiting unit that inhibits stimulation of said second-

stimulated ventricle in response to detection, by said evoked response detector, of a sensed intrinsic cardiac event in said second-stimulated ventricle.

7. (New) A biventricular cardiac stimulation device as claimed in claim  
5 5 wherein said control unit sets said VV time delay to be less than 40 msec.

8. (New) A biventricular cardiac stimulation device as claimed in claim  
7 wherein said control unit sets said VV time delay in a range between 10 and  
30 msec.

9. (New) A biventricular cardiac stimulation device as claimed in claim  
10 5 wherein said evoked response detector sets said evoked response detection time window for said first-stimulated ventricle to be in a range between 40 and 100 msec.

10. (New) A method for biventricular cardiac stimulation comprising  
the steps of:

15 a pulse generator adapted to interact respectively with ventricles of a heart to deliver stimulation pulses to each of the ventricles;

a control unit connected to the pulse generator to operate the pulse generator to emit a stimulation pulse to a first-stimulated ventricle, followed by a VV time delay, followed by a stimulation pulse to a second-stimulated ventricle;

20 25 an evoked response detector adapted to interact with the ventricles and having independent, first and second ventricular sensing channels to detect ventricular evoked response in the respective ventricles, said evoked response detector searching for an evoked response following delivery of a stimulation pulse to said first-stimulated ventricle in an evoked response detection time window;

25 30 said control unit setting said VV time delay to be shorter than said evoked response detection time window; and

said evoked response detector closing said evoked response detecting time window, or discarding detections therein, in response to

emission of the stimulation pulse to the second-stimulated ventricle during said evoked response detection time window following said first-stimulated ventricle.

11. (New) A method as claimed in claim 5, comprising an inhibiting unit that inhibits stimulation of said second-stimulated ventricle in response to detection, by said evoked response detector, of a sensed intrinsic cardiac event in said second-stimulated ventricle.

12. (New) A method as claimed in claim 5 wherein said control unit sets said VV time delay to be less than 40 msec.

10 13. (New) A method as claimed in claim 7 wherein said control unit sets said VV time delay in a range between 10 and 30 msec.

14. (New) A method as claimed in claim 5 wherein said evoked response detector sets said evoked response detection time window for said first-stimulated ventricle to be in a range between 40 and 100 msec.